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August 16, 2005

Arthur Neal, Director  
National Organic Program  
USDA  
1400 Independence Ave S.W. Room 4008  
Washington, D.C.

**Subject: Docket number TM-04-07**

Dear Mr. Neal,

**Rio Tinto Borax and its customers support continuing the allowances for substances identified in the ANPR as indicated below.**

Specifically our concern is the impact of removing an allowance that is clearly better for the environment and human health than the alternative – unprocessed minerals. In the section for crop production allowances as highlighted below, soluble boron products are listed as a source of boron, which is essential to plant and human health. As an essential nutrient farmers around the world rely on boron to increase crop yield and quality. Boron (B) is one of seven essential plant micronutrients, but its effects are macro. B plays a vital role in plant reproduction – controlling flowering, pollen production, germination and fruit development. B is also necessary for plant growth – moving sugars from leaves to growth areas and roots. Independent research shows that B fertilizers can quadruple corn yields and increase cotton yields by hundreds of pounds per acre. Nevertheless, B deficiency is one of the most widespread of all crop deficiencies, affecting almost all major crops grown around the world.

Another important trend for the entire fertilizer industry is sustainable development – or how the industry measures and improves its social, environmental and economic contribution over time. Processing sodium borates, minimize impact to the environment by removing natural contaminants, i.e. arsenic. The natural substitute - unprocessed ore adds heavy metals and other contaminants to the soil and food supply. Though many boron nutrients are synthetic it is with minimal processing. The primary process includes dissolving in hot water, settling heavy particles, crystallizing through control of temperature and slurry movement, centrifuging, drying, and physically filtering with screens. Use of boron as a micronutrient also contributes to the economic return of farming by increasing yields of many crops as well as replenishing depleted soils which may otherwise be difficult to grow crops.

Boron supplements are compatible with most all crop aids and substances.

Boron has low toxicity which is certainly balanced by its positive effects - nutritional value for plants and animals. Boron is naturally present in all plants and self regulates the amount of uptake from the soil.

Lastly, Boric acid used as an insecticide is already limited to structural pest control with no additional contact to crops. Boric acid and sodium borates are considered one of the least toxic alternatives for controlling a wide array of pests.

Loss of boron supplements to the organic industry we believe would be detrimental to productive crop growth.

Should you have any questions please feel free to contact me at [tracy.branch@borax.com](mailto:tracy.branch@borax.com) or (661) 287-5435.

A handwritten signature in black ink, appearing to read 'Tracy Branch', with a stylized, cursive script.

Tracy Branch  
Product Safety Manager  
Rio Tinto Borax

**§205.601 Synthetic substances allowed for use in organic crop production.**

(a) As algicide, disinfectants, and sanitizer, including irrigation system cleaning systems. (1) Alcohols. (i) Ethanol. (ii) Isopropanol. (2) Chlorine materials—Except, That, residual chlorine levels in the water shall not exceed the maximum residual disinfectant limit under the Safe Drinking Water Act. (i) Calcium hypochlorite. (ii) Chlorine dioxide. (iii) Sodium hypochlorite. (4) Hydrogen peroxide. (7) Soap-based algicide/demossers. ...

(e) As insecticides (including acaricides or mite control). (1) Ammonium carbonate—for use as bait in insect traps only, no direct contact with crop or soil. (2) **Boric acid—structural pest control, no direct contact with organic food or crops.** (4) Elemental sulfur. (5) Lime sulfur—including calcium polysulfide. (6) Oils, horticultural—narrow range oils as dormant, suffocating, and summer oils. (7) Soaps, insecticidal. (8) Sticky traps/barriers. ...

**(j) As plant or soil amendments.** (1) Aquatic plant extracts (other than hydrolyzed)—Extraction process is limited to the use of potassium hydroxide or sodium hydroxide; solvent amount used is limited to that amount necessary for extraction. (2) Elemental sulfur. (3) Humic acids—naturally occurring deposits, water and alkali extracts only. (4) Lignin sulfonate—chelating agent, dust suppressant, floatation agent. (5) Magnesium sulfate—allowed with a documented soil deficiency. **(6) Micronutrients—not to be used as a defoliant, herbicide, or desiccant. Those made from nitrates or chlorides are not allowed. Soil deficiency must be documented by testing.** **(i) Soluble boron products.** (ii) Sulfates, carbonates, oxides, or silicates of zinc, copper, iron, manganese, molybdenum, selenium, and cobalt. (7) Liquid fish products—can be pH adjusted with sulfuric, citric or phosphoric acid. The amount of acid used shall not exceed the minimum needed to lower the pH to 3.5. (8) Vitamins, B1, C, and E.